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IN THE CLAIMS

Claim 1 (currently amended) A method for producing an ultrafine fiber, comprising:

spinning an island polymer and a sea polymer into an ultrafine fiber, wherein said island polymer is an polyolefin polymer having a density less than 1.0 g/cm^3 and a flexural modulus ~~more than~~ between 9000 kg/cm^2 and 15000 kg/cm^2 and said sea polymer has a different dissolving and removing property from that of said island polymer.

Claim 2 (original) A method according to claim 1, wherein said island polymer and sea polymer is spun in a weight ratio ranging from about 5:95 to about 95:5 by a mixed spinning method or a conjugated spinning method to said fiber.

Claim 3 (canceled)

Claim 4 (original) A method according to Claim 1, wherein said island polymer is selected from the group consisting of polypropylene, polyethylene, ethylene-propylene copolymer, polyethylene elastomer polymer, and polypropylene elastomer polymer.

Claim 5 (original) A method according to Claim 1, wherein said sea polymer is an organic solvent-soluble polyolefin polymer selected from the group consisting of polystyrene, polyethylene, and ethylene-propylene copolymer.

Claim 6 (previously amended) A method according to Claim 1, wherein said sea polymer is an alkali-soluble polymer.

Claim 7 (previously amended) A method according to Claim 1, wherein said sea polymer further comprises at least one component selected from the group consisting of para-terephthalic acid, aliphatic dicarboxylic acid, aromatic dicarboxylic acid, aliphatic diol, aromatic diol, and carboxylic acid.

Claim 8 (original) A method according to Claim 1, wherein said sea polymer is a water-soluble polymer selected from the group consisting of polyvinyl alcohol, water-soluble polyester copolymer comprising isopropyl alcohol (IPA), terephthalic acid (TPA), acrylic acid (AA), sulfonic sodium salt (SIP), and polyethyleneglycol.

Claim 9 (currently amended) A method for producing an ultrafine fiber substrate, comprising:

spinning an island polymer and a sea polymer into an ultrafine fiber, wherein said island polymer is an polyolefin polymer having a density less than 1.0 g/cm^3 and a flexural modulus

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~~more than~~ between $9000\text{kg}/\text{cm}^2$ and $15000\text{kg}/\text{cm}^2$ and said sea polymer has a different dissolving and removing property from that of said island polymer;

producing a substrate from said ultrafine fiber; and

removing said sea polymer from said substrate to obtain said ultrafine fiber substrate.

Claim 10 (original) A method according to Claim 9, further comprising a step of immersing said substrate into a polymer prior to removing said sea polymer from said substrate.

Claim 11 (original) A method according to Claim 9, further comprising a step of polishing a surface of said substrate surface after removing said sea polymer from said substrate.

Claim 12 (previously amended) A method according to Claim 9, wherein said substrate is needle-punched nonwoven fabric, water-punched nonwoven fabric, weaved fabric, or knitted fabric.

Claim 13 (canceled)

Claim 14 (previously presented) A method according to Claim 9, wherein said island polymer is selected from the group consisting of polypropylene, polyethylene, ethylene-propylene copolymer, polyethylene elastomer polymer, and polypropylene elastomer polymer.

Claim 15 (original) A method according to Claim 9, wherein said sea polymer is an organic solvent-soluble polyolefin polymer selected from the group consisting of polystyrene, polyethylene, and ethylene-propylene copolymer.

Claim 16 (previously amended) A method according to Claim 9, wherein said sea polymer is an alkali-soluble polymer.

Claim 17 (previously amended) A method according to Claim 16, wherein said sea polymer further comprises at least one component selected from the group consisting of para-terephthalic acid, aliphatic dicarboxylic acid, aromatic dicarboxylic acid, aliphatic diol, aromatic diol, and carboxylic acid.

Claim 18 (original) A method according to Claim 9, wherein said sea polymer is a water-soluble polymer selected from the group consisting of polyvinyl alcohol, water-soluble polyester copolymer comprising isopropyl alcohol (IPA), terephthalic acid (TPA), acrylic acid (AA), sulfonic sodium salt (SIP), and polyethyleneglycol.

Claim 19 (original) A method according to Claim 9, wherein said island polymer has a fineness from about 0.5 to 0.001 denier per filament after removing said sea polymer from said ultrafine fiber.

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Claim 20 (original) A method according to claim 9, wherein said island polymer and sea polymer is spun in a weight ratio ranging from about 5:95 to about 95:5 by a mixed spinning method or a conjugated spinning method to said fiber.